



US006327497B1

(12) **United States Patent**
Kirchgeorg et al.

(10) **Patent No.:** **US 6,327,497 B1**
(45) Date of Patent: **Dec. 4, 2001**

(54) **PORTABLE EMERGENCY OXYGEN AND
AUTOMATIC EXTERNAL DEFIBRILLATOR
(AED) THERAPY SYSTEM**

(75) **Inventors:** John Kirchgeorg, Milwaukee, WI
(US); Richard C. Turner, Washington,
DC (US)

(73) **Assignee:** Life Corporation, Milwaukee, WI (US)

(*) **Notice:** Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.

(21) **Appl. No.:** 09/151,300

(22) **Filed:** Sep. 11, 1998

(51) **Int. Cl.⁷** A61B 19/00; A61N 1/00;
A61J 1/00

(52) **U.S. Cl.** 607/3; 128/897; 206/572

(58) **Field of Search** 600/301, 300,
600/368, 323, 509, 529; 607/5, 2, 3, 81;
128/897; 206/571, 572, 363

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,613,677 * 10/1971 Blasko .
4,109,828 * 8/1978 Stewart 222/3
4,197,842 * 4/1980 Anderson 128/203.12
4,198,963 * 4/1980 Barkalow et al. 128/53
4,241,833 * 12/1980 Luebcke .
4,257,415 * 3/1981 Rubin 128/200.21
5,207,303 * 5/1993 Oswald et al. .
5,243,975 9/1993 Alferness et al. .
5,308,320 * 5/1994 Safar et al. 604/4
5,494,051 * 2/1996 Schneider, Sr. 128/870
5,529,063 6/1996 Hill .
5,549,659 8/1996 Johansen et al. .
5,605,150 2/1997 Radons et al. .
5,626,151 * 5/1997 Linden 128/897
5,653,685 * 8/1997 Klatz et al. 604/26
5,662,690 9/1997 Cole et al. .
5,700,281 12/1997 Brewer et al. .

5,716,380 2/1998 Yerkovich et al. .
5,749,902 5/1998 Olson et al. .
5,749,913 5/1998 Cole .
5,782,878 7/1998 Morgan et al. .
5,785,043 7/1998 Cyrus et al. .
5,792,190 8/1998 Olson et al. .
5,797,969 8/1998 Olson et al. .
5,895,354 * 4/1999 Simmons 600/301
5,918,331 * 7/1999 Hall et al. 5/626
5,975,081 * 11/1999 Hood et al. 28/846
6,046,046 * 4/2000 Hassanein 435/284.1
6,186,977 * 2/2001 Andrews et al. 604/67

OTHER PUBLICATIONS

"First Save: The simple, safe and affordable life saving
solution", Survival Ink Corporation, 1997.

"It's a fire extinguisher your people can use to put out a
cardiac arrest", Phisio-Control Corporation, 1998.

"When survival is measured in minutes", Heartstream, Inc.
1996.

"CPR Prompt-AED/CPR Total Trainer", CPR Prompt, Inc.,
Jan., 1998.

"paraPAC is for CPR", pneuPAC, Inc., 1998.

* cited by examiner

Primary Examiner—Kennedy Schaetzle

(74) **Attorney, Agent, or Firm**—Sughrue, Mion, Zinn,
Macpeak & Seas, PLLC

(57) **ABSTRACT**

This invention provides a medical diagnosis and therapy
system particularly adapted for the combined uses of emer-
gency cardiac defibrillation and pulmonary oxygen
administration, including automated patient cardiopulmo-
nary assessment and voice prompted therapy and resuscita-
tion: electrocardio diagnosis/monitoring/defibrillation and
electropulmonary blood oximetry/oxygen administration.
The system has a case having access opening(s) and clear
cover(s) to view the apparatus and contents, to dispel all
doubt as to know how to open the case and to make it easy
for a user to quickly find and use the various components.

10 Claims, 4 Drawing Sheets

